# AIR CONDITIONER INDOOR UNIT
## Floor console/under ceiling dual type

# INSTALLATION MANUAL

For authorized service personnel only.



## Contents

PART NO. 9379125000

# 1. SAFETY PRECAUTIONS

• Be sure to read this Manual thoroughly before installation.
• The warnings and precautions indicated in this Manual contain important information pertaining to your safety. Be sure to observe them.
• Hand this Manual, together with the Operating Manual, to the customer. Request the customer to keep them on hand for future use, such as for relocating or repairing the unit.

| ⚠ WARNING | This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user. |
|---|---|

• Request your dealer or a professional installer to install the indoor unit in accordance with this Installation Manual. An improperly installed unit can cause serious accidents such as water leakage, electric shock, or fire. If the indoor unit is installed in disregard of the instructions in the Installation Manual, it will void the manufacturer's warranty.

• Do not turn ON the power until all work has been completed. Turning ON the power before the work is completed can cause serious accidents such as electric shock or fire.

• If refrigerant leaks while work is being carried out, ventilate the area. If the refrigerant comes in contact with a flame, it produces a toxic gas.

• Installation work must be performed in accordance with national wiring standards by authorized personnel only.

| ⚠ CAUTION | This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property. |
|---|---|

# 2. ABOUT THE UNIT

## 2.1. Precautions for using R410A refrigerant

### ⚠WARNING

• Do not introduce any substance other than the prescribed refrigerant into the refrigeration cycle. If air enters the refrigeration cycle, the pressure in the refrigeration cycle will become abnormally high and cause the piping to rupture.

• If there is a refrigerant leak, make sure that it does not exceed the concentration limit. If a refrigerant leak exceeds the concentration limit, it can lead to accidents such as oxygen starvation.

• Do not touch refrigerant that has leaked from the refrigerant pipe connections or other area. Touching the refrigerant directly can cause frostbite.

• If a refrigerant leak occurs during operation, immediately vacate the premises and thoroughly ventilate the area. If the refrigerant comes in contact with a flame, it produces a toxic gas.

## 2.2. Special tool for R410A

### ⚠ WARNING

• To install a unit that uses R410A refrigerant, use dedicated tools and piping materials that have been manufactured specifically for R410A use. Because the pressure of R410A refrigerant is approximately 1.6 times higher than the R22, failure to use dedicated piping material or improper installation can cause rupture or injury. Furthermore, it can cause serious accidents such as water leakage, electric shock, or fire.

| Tool name | Changes |
|---|---|
| **Gauge manifold** | The pressure in the refrigerant system is extremely high and cannot be measured with a conventional gauge. To prevent erroneous mixing of other refrigerants, the diameter of each port has been changed. It is recommended to use a gauge manifold with a high pressure display range of –0.1 to 5.3 MPa and a low pressure display range of –0.1 to 3.8 MPa. |
| **Charging hose** | To increase pressure resistance, the hose material and base size were changed. (The charging port thread diameter for R410A is 1/2 UNF 20 threads per inch.) |
| **Vacuum pump** | A conventional vacuum pump can be used by installing a vacuum pump adapter. Be sure that the pump oil does not backflow into the system. Use one capable for vacuum suction of –100.7 kPa (5 Torr, –755 mmHg). |
| **Gas leakage detector** | Special gas leakage detector for R410A refrigerant. |

## 2.3. Accessories

- The following installation parts are furnished. Use them as required.
- Keep the Installation Manual in a safe place and do not discard any other accessories until the installation work has been completed.

| Name and Shape | Q'ty | Description |
|---|---|---|
| Cover plate (left) | 1 | |
| Cover plate (right) | 1 | |
| Screw (M4 × 10) | 2 | |
| Installation template | 1 | For positioning the indoor unit<br>For under ceiling type |
| Bracket (left) | 1 | For suspending the indoor unit from ceiling |
| Bracket (right) | 1 | |
| Anchor bolt (M12) | 4 | |
| Spring washer | 4 | |
| Special nut | 4 | |
| Wall bracket | 2 | For suspending the indoor unit on the wall |
| Screw (M4 × 20) | 6 | For fixing the wall bracket |
| Coupler heat insulator (Large) | 1 | For indoor side pipe joint (Large pipe) |
| Coupler heat insulator (Small) | 1 | For indoor side pipe joint (Small pipe) |
| Binder (Large) | 1 | For fixing the drain hose |
| Binder (Small) | 2 | For electrical wiring |
| Wire clamper | 1 | For electrical wiring |
| Drain hose | 1 | |
| Insulation (drain hose) | 1 | Adhesive type 70 × 230 |
| VT wire | 1 | For fixing the drain hose L 280 mm |
| Remote control unit | 1 | For air conditioner operation |
| Battery (penlight) | 2 | For remote control unit |
| Remote control unit holder | 1 | Use as remote control unit holder |
| Screw (M3 × 12) | | For remote control unit holder installation |

## 2.4. Optional parts

| Exterior | Parts name | Model No. | Summary |
|---|---|---|---|
| | Wired remote controller | UTB-*UD | Unit control is performed by wired remote controller |

Wired remote controller is recommended using simultaneous twin or triple connection.

# 3. INSTALLATION WORK

Especially, the installation place is very important for the split type air conditioner because it is very difficult to move from place to place after the first installation.

## 3.1. Selecting an installation location

Decide the mounting position together with the customer as follows.

> ### ⚠ WARNING
>
> • Select installation locations that can properly support the weight of the indoor unit. Install the units securely so that they do not topple or fall.

> ### ⚠ CAUTION
>
> • Do not install the indoor unit in the following areas:
>   • Area with high salt content, such as at the seaside. It will deteriorate metal parts, causing the parts to fall or the unit to leak water.
>   • Area filled with mineral oil or containing a large amount of splashed oil or steam, such as a kitchen. It will deteriorate plastic parts, causing the parts to fall or the unit to leak water.
>   • Area that generates substances that adversely affect the equipment, such as sulfuric gas, chlorine gas, acid, or alkali. It will cause the copper pipes and brazed joints to corrode, which can cause refrigerant leakage.
>   • Area that can cause combustible gas to leak, contains suspended carbon fibers or flammable dust, or volatile inflammables such as paint thinner or gasoline. If gas leaks and settles around the unit, it can cause a fire.
>   • Area where animals may urinate on the unit or ammonia may be generated.
>
> • Do not install where there is the danger of combustible gas leakage.
>
> • Do not install the unit near a source of heat, steam, or flammable gas.
>
> • Install the indoor unit, outdoor unit, power supply cable, transmission cable, and remote control cable at least 1 m away from a television or radio receivers. The purpose of this is to prevent TV reception interference or radio noise. (Even if they are installed more than 1 m apart, you could still receive noise under some signal conditions.)
>
> • If children under 10 years old may approach the unit, take preventive measures so that they cannot reach the unit.
>
> • Take precautions to prevent the unit from falling.

(1) Install the indoor unit on a place having a sufficient strength so that it withstands against the weight of the indoor unit.
(2) The inlet and outlet ports should not be obstructed; the air should be able to blow all over the room.
(3) Leave the space required to service the air conditioner.
(4) Install the unit where connection to the outdoor unit is easy.
(5) Install the unit where the connection pipe can be easily installed.
(6) Install the unit where the drain pipe can be easily installed.
(7) Install the unit where noise and vibrations are not amplified.
(8) Take servicing, etc., into consideration and leave the spaces. Also install the unit where the filter can be removed.
(9) Do not install the unit where it will be exposed to direct sunlight.

## 3.2. Installation dimension

**Floor console**
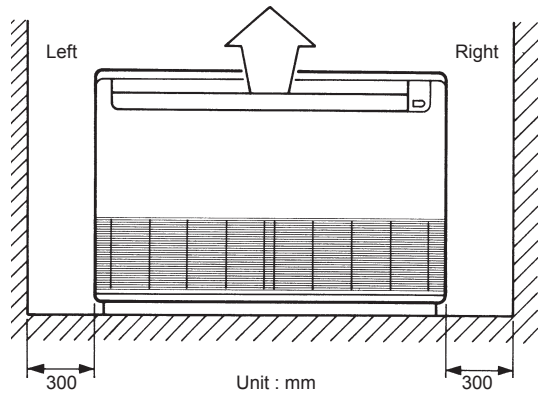


**Under ceiling**
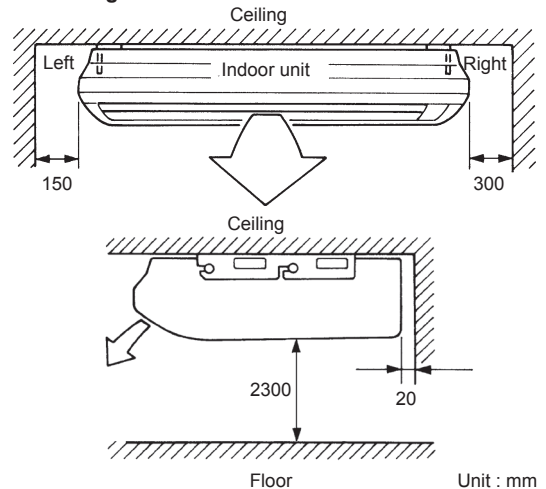


## 3.3. Installation the unit

> ### ⚠ WARNING
>
> • Install the air conditioner in a location which can withstand a load of at least five times the weight of the main unit and which will not amplify sound or vibration. If the installation location is not strong enough, the indoor unit may fall and cause injuries.

### 3.3.1. Preparing indoor unit installation

Open the intake grille and remove the three screws.
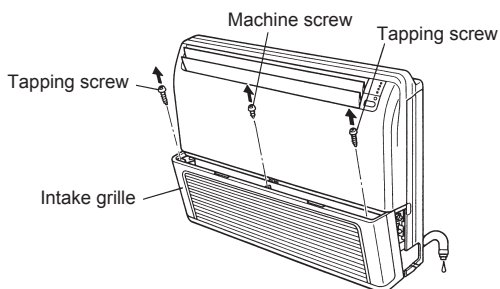


Remark : The main unit can be wired before the indoor unit is installed.
Select the most appropriate installation order.

### 3.3.2. Indoor unit installation
### A. Floor console type

#### Drilling for piping

Select piping and drain directions.
The piping and drain can be made in three directions as shown below.



VIEW ①
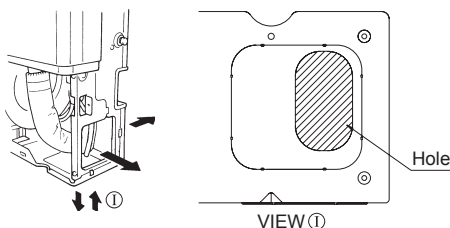
For direction , bore the oval hole shown in the above figure. The drain hose can be connected to either the left or right side.



Drain hose (Left side)  Drain hose (Right side)
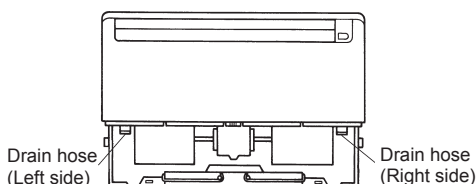
When the directions are selected, drill a 10 cm dia. hole on the wall so that the hole is tilted downward toward the outdoor for smooth water flow.
When the pipe is led out from the rear, make a hole as shown in the figure, at the position shown.



Wall
100
6
Indoor side  Outdoor side  Unit : mm
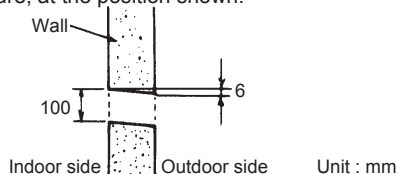
When installing set to wall install the accessory wall bracket at the position as shown in the figure, and mount the set to it.



Unit : mm
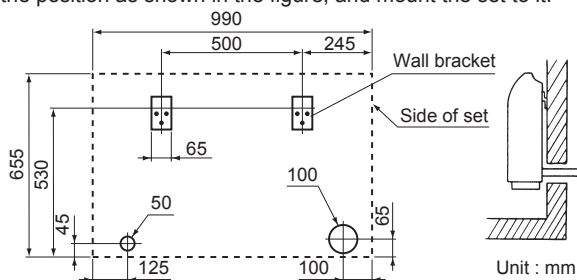
### B. Under ceiling type

Using the installation template, drill holes for piping and anchor bolts (for holes).
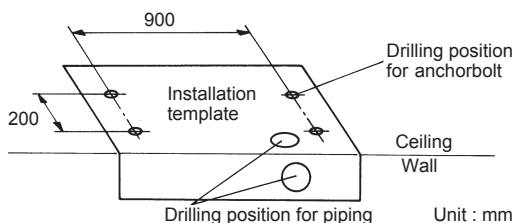


900
200
Installation template
Drilling position for anchorbolt
Ceiling
Wall
Drilling position for piping  Unit : mm

### B-1. Drilling for piping

Select piping and drain directions.



Top
② Rear
(Install the drain hose in this direction.)
Right
Hole
VIEW ②
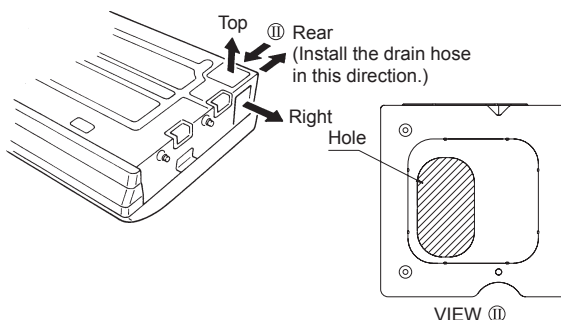
For direction , bore the oval hole shown in the above figure.

> **⚠CAUTION**
>
> • Install the drain hose at the rear; it should not be installed on the top or right side.

When the directions are selected, drill 80 mm and 50 mm or 150 mm dia. hole on the wall so that the hole is tilted downward toward the outdoor for smooth water flow.



Wall
6
Indoor side  Outdoor side  Unit : mm
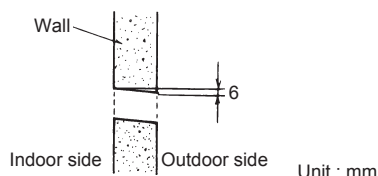
### B-2. Drilling holes for anchor bolts and installing the anchor bolts

With a concrete drill, drill four 12.7 mm dia. holes.



60 to 70
ø12.7  Unit : mm
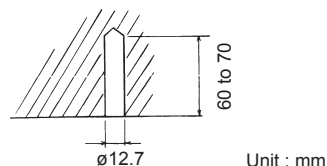
Insert the anchor bolts into the drilled holes, and drive the pins completely into the anchor bolts with a hammer.
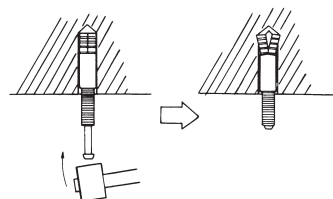
## B-3. Installing brackets

Install the brackets with nuts, washers and spring washers.



Bracket (Left)

Bracket (Right)

Spring washer
Special nut
Bracket
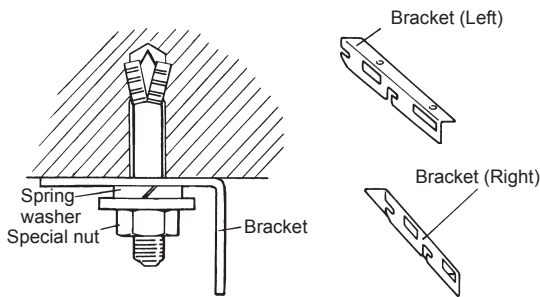
## B-4. Installing indoor unit

Reset the hex bolts as shown in the figure



Hex bolt

Indoor unit

8 to 13

Unit : mm
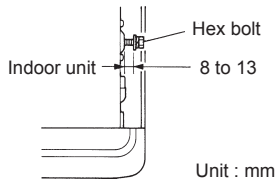
Apply the indoor unit to the brackets.



Bolt

Bracket

Indoor unit
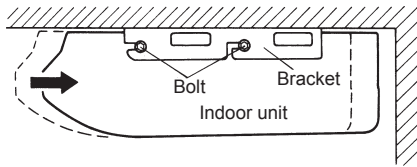
Now, securely tighten the hex bolts in both sides.

### 3.3.3. Barrier and RFM base removal and installation

(1) Remove the barriers by removing the 4 fixing screws (2 screws each).
(2) Remove the RFM base by removing the 2 fixing screws and unhooking the 1 hook.
(3) After completing the work, install the barriers and RFM base as they were originally.



Fixing screw (2 positions)

Barriers

Fixing screw (2 positions)

Hook

RFM base
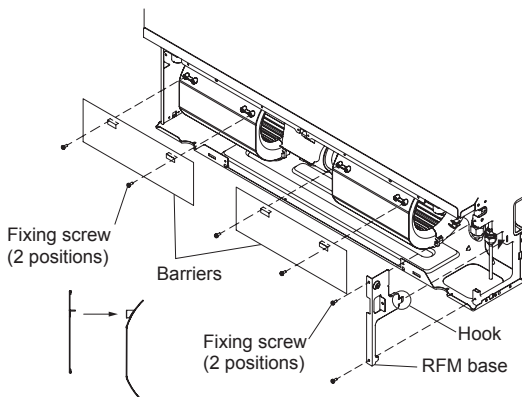
Install the barriers in the correct direction.

# 4. PIPE INSTALLATION

> ⚠ **CAUTION**
>
> • Be more careful that foreign matter (oil, water, etc.) does not enter the piping than with refrigerant R410A models. Also, when storing the piping, securely seal the openings by pinching, taping, etc.
>
> • While welding the pipes, be sure to blow dry nitrogen gas through them.

## 4.1. Selecting the pipe material

> ⚠ **CAUTION**
>
> • Do not use existing pipes.
>
> • Use pipes that have clean external and internal sides without any contamination which may cause trouble during use, such as sulfur, oxide, dust, cutting waste, oil, or water.
>
> • It is necessary to use seamless copper pipes. Material : Phosphor deoxidized seamless copper pipes It is desirable that the amount of residual oil is less than 40 mg/10 m.
>
> • Do not use copper pipes that have a collapsed, deformed, or discolored portion (especially on the interior surface). Otherwise, the expansion valve or capillary tube may become blocked with contaminants.
>
> • Improper pipe selection will degrade performance. As an air conditioner using R410A incurs pressure higher than when using conventional refrigerant, it is necessary to choose adequate materials.

• Thicknesses of copper pipes used with R410A are as shown in the table.
• Never use copper pipes thinner than those indicated in the table even if they are available on the market.

**Thicknesses of Annealed Copper Pipes (R410A)**

| Pipe outside diameter [mm (in.)] | Thickness [mm] |
|---|---|
| 6.35 (1/4) | 0.80 |
| 9.52 (3/8) | 0.80 |
| 12.70 (1/2) | 0.80 |
| 15.88 (5/8) | 1.00 |
| 19.05 (3/4) | 1.20 |

## 4.2. Pipe requirement

> ⚠ **CAUTION**
>
> • Refer to the Installation Manual of the outdoor unit for description of the length and the diameter of connecting pipe or for difference of its elevation.

• Use pipe with water-resistant heat insulation.

> ⚠ **CAUTION**
>
> • Install heat insulation around both the gas and liquid pipes. Failure to do so may cause water leaks.
> Use heat insulation with heat resistance above 120 °C. (Reverse cycle model only)
> In addition, if the humidity level at the installation location of the refrigerant piping is expected to exceed 70 %, install heat insulation around the refrigerant piping.
> If the expected humidity level is 70-80 %, use heat insulation that is 15 mm or thicker and if the expected humidity exceeds 80 %, use heat insulation that is 20 mm or thicker. If heat insulation is used that is not as thick as specified, condensation may form on the surface of the insulation.
> In addition, use heat insulation with heat conductivity of 0.045 W/(m·K) or less (at 20 °C).

## 4.3. Flare connection (pipe connection)

### 4.3.1. Flaring

• Use special pipe cutter and flare tool exclusive for R410A.
(1) Cut the connection pipe to the necessary length with a pipe cutter.
(2) Hold the pipe downward so that cuttings will not enter the pipe and remove any burrs.
(3) Insert the flare nut (always use the flare nut attached to the indoor and outdoor units respectively) onto the pipe and perform the flare processing with a flare tool.
Leakage of refrigerant may result if other flare nuts are used.
(4) Protect the pipes by pinching them or with tape to prevent dust, dirt, or water from entering the pipes.



Check if [L] is flared uniformly and is not cracked or scratched.

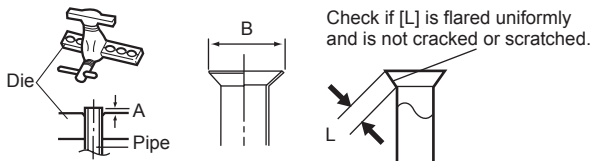| Pipe outside diameter [mm (in.)] | Dimension A [mm] Flare tool for R410A, clutch type | Dimension B$_{-0.4}^{0}$ [mm] |
|---|---|---|
| 6.35 (1/4) | | 9.1 |
| 9.52 (3/8) | | 13.2 |
| 12.70 (1/2) | 0 to 0.5 | 16.6 |
| 15.88 (5/8) | | 19.7 |
| 19.05 (3/4) | | 24.0 |

When using conventional flare tools to flare R410A pipes, the dimension A should be approximately 0.5 mm more than indicated in the table (for flaring with R410A flare tools) to achieve the specified flaring. Use a thickness gauge to measure the dimension A.



Width across flats

| Pipe outside diameter [mm (in.)] | Width across flats of Flare nut [mm] |
|---|---|
| 6.35 (1/4) | 17 |
| 9.52 (3/8) | 22 |
| 12.70 (1/2) | 26 |
| 15.88 (5/8) | 29 |
| 19.05 (3/4) | 36 |
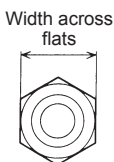
### 4.3.2 Bending pipes

• The pipes are shaped by your hands or pipe bender. Be careful not to collapse them.
• Do not bend the pipes at an angle more than 90°.
• When pipes are repeatedly bend or stretched, the material will harden, making it difficult to bend or stretch them any more. Do not bend or stretch the pipes more than three times.

> ⚠ **CAUTION**
>
> • To prevent breaking of the pipe, avoid sharp bends.
>
> • If the pipe is bent repeatedly at the same place, it will break.

### 4.3.3. Pipe connection

(1) Centering the pipe against port on the indoor unit, turn the flare nut with your hand. Be sure that the small pipe is completely installed before connecting the large the pipe.

> ⚠ **CAUTION**
>
> • Be sure to apply the pipe against the port on the indoor unit and the outdoor unit correctly. If the centering is improper, the flare nut cannot be tightened smoothly. If the flare nut is forced to turn, the threads will be damaged.
>
> • Do not remove the flare nut from the indoor unit pipe until immediately before connecting the connection pipe.
>
> • Do not use mineral oil on flared part. Prevent mineral oil from getting into the system as this would reduce the lifetime of the units.

(2) Install the outdoor unit wall cap (supplied with the optional installation set or procured at the site) to the wall hole pipe.
(3) Connect the outdoor unit and indoor unit piping.
(4) After matching the center of the flare surface and tightening the nut hand tight, tighten the nut to the specified tightening torque with a torque wrench.

> ⚠ **CAUTION**
>
> • Hold the torque wrench at its grip, keeping it in the right angle with the pipe, in order to tighten the flare nut correctly.
>
> • Tighten the flare nuts with a torque wrench using the specified tightening method. Otherwise, the flare nuts could break after a prolonged period, causing refrigerant to leak and generate a hazardous gas if the refrigerant comes into contact with a flame.



Tighten with two wrenches.
Holding wrench
Flare nut
Torque wrench
Indoor unit pipe (Body side)
Connection pipe
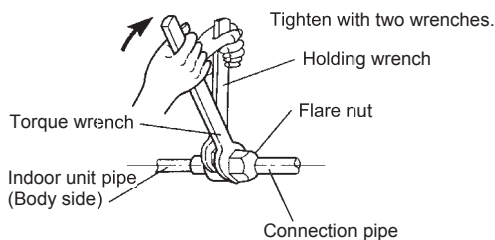
| Flare nut [mm (in.)] | Tightening torque [N·m (kgf·cm)] |
|---|---|
| 6.35 (1/4) dia. | 16 to 18 (160 to 180) |
| 9.52 (3/8) dia.. | 32 to 42 (320 to 420) |
| 12.70 (1/2) dia.. | 49 to 61 (490 to 610) |
| 15.88 (5/8) dia. | 63 to 75 (630 to 750) |
| 19.05 (3/4) dia. | 90 to 110 (900 to 1,100) |

## 4.4. Installing heat insulation

> **⚠ CAUTION**
> • After checking for gas leaks (refer to the Installation Manual of the outdoor unit), perform this section.
>
> • Install heat insulation around both the large (gas) and small (liquid) pipes. Failure to do so may cause water leaks.

After checking for gas leaks, insulate by wrapping insulation around the two parts (Gas and Liquid) of the indoor unit coupling, using the coupler heat insulation.

After installing the coupler heat insulation, wrap both ends with vinyl tape so that there is no gap.

Secure both ends of the heat insulation material using Binder. And finally fix connection pipe (Liquid) to connection pipe (Gas) by rolling vinyl tape over coupler heat insulation (Gas) and coupler heat insulation (Liquid).
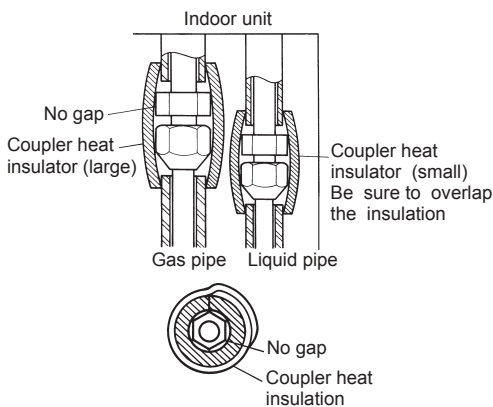


> **⚠ CAUTION**
> • There should be no gaps between the insulation and the unit.

## 5. INSTALLING DRAIN HOSE

> **⚠ CAUTION**
> • Install the drain hose in accordance with the instructions in this Installation Manual and keep the area warm enough to prevent condensation. Problems with the piping may lead to water leaks.

• During installation of the drain hose, be careful to avoid applying pressure to the drain port of the indoor unit.
• Do not perform air bleeding.

### A. Floor console type

Select whether the drain hose will be connected to the left or right side.

Insert the drain hose into the drain pan, then secure the drain hose with a nylon fastener.
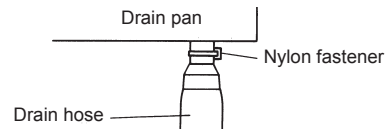


Wrap the insulation (drain hose) around the drain hose connection.
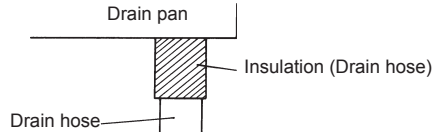


Be sure to arrange the drain hose so that it is leveled lower than the drain hose connecting port of the indoor unit.
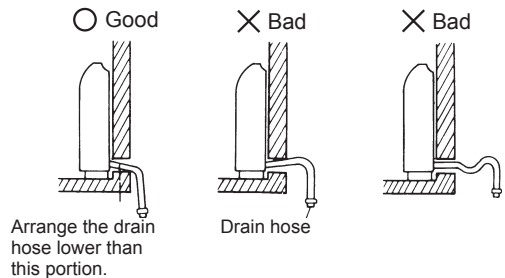


> **⚠CAUTION**
> • Do not install the unit so that the drain hose side is too high. Height A should be less than 5 mm.
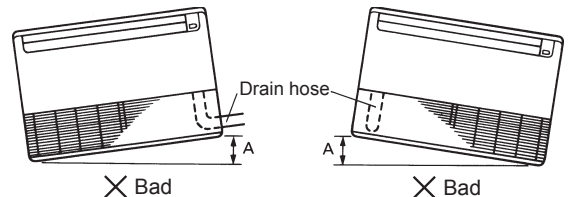


### B. Under ceiling type

Select whether the drain hose will be connected to the left or right side.

Insert the drain hose into the drain pan, then secure the drain hose with a nylon fastener.

Wrap the insulation (drain hose) around the drain hose connection.

Be sure to arrange the drain hose so that it is leveled lower than the drain hose connecting port of the indoor unit.
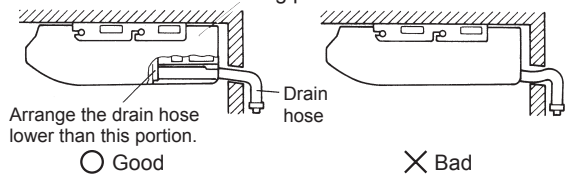


When drain hose is arranged backward.
Secure the drain hose with the VT wire.
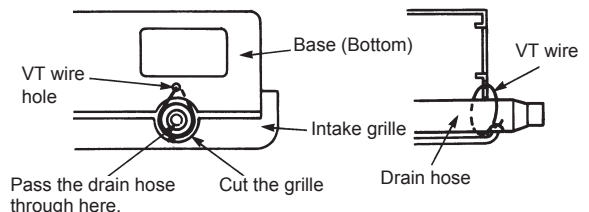
# 6. ELECTRICAL WIRING

## ⚠ WARNING

- Electrical work must be performed in accordance with this Sheet by a person certified under the national or regional regulations. Be sure to use a dedicated circuit for the unit.
  An insufficient power supply circuit or improperly performed electrical work can cause serious accidents such as electric shock or fire.

- Before starting work, check that power is not being supplied to the indoor unit and outdoor unit.

- Use the included connection cables and power cables or ones specified by the manufacturer. Improper connections, insufficient insulation, or exceeding the allowable current can cause electric shock or fire.

- For wiring, use the prescribed type of wires, connect them securely, making sure that there are no external forces of the wires applied to the terminal connections. Improperly connected or secured wires can cause serious accidents such as overheating the terminals, electric shock, or fire.

- Do not modify the power cables, use extension cables, or use any branches in the wiring. Improper connections, insufficient insulation, or exceeding the allowable current can cause electric shock or fire.

- Match the terminal board numbers and connection cable colors with those of the outdoor unit. Erroneous wiring may cause burning of the electric parts.

- Securely connect the connection cables to the terminal board. In addition, secure the cables with wiring holders. Improper connections, either in the wiring or at the ends of the wiring, can cause a malfunction, electric shock, or fire.

- Always fasten the outside covering of the connection cable with the cable clamp. (If the insulator is chafed, electric leakage may occur.)

- Securely install the electrical box cover on the unit. An improperly installed electrical box cover can cause serious accidents such as electric shock or fire through exposure to dust or water.

- Install sleeves into any holes made in the walls for wiring. Otherwise, a short circuit could result.

- Install a ground leakage breaker. In addition, install the ground leakage breaker so that the entire AC main power supply is cut off at the same time. Otherwise, electric shock or fire could result.

- Install a ground leakage breaker.
  If a ground leakage breaker is not installed, it may cause electric shock or fire.

- Always connect the ground wire.
  Improper grounding work can cause electric shocks.

- Install the remote controller cable and bus wire so as not to be direct touched with your hand.

## 6.1. Electrical requirement

| | Power supply cable Transmission cable | Earth cable |
|---|---|---|
| Conductor size (mm²) | 1.5 | 1.5(MIN.) |

| | Conductor size (mm²) | Max length (m) |
|---|---|---|
| Bus wire | 0.3(MIN.) | 500* |

*This length shall be the total extended length in the system of the group.

- Use conformed cable with Type 245 IEC57. (Power supply cable or transmission cable)
- Perform all electrical work according to the standard.
- Install circuit breakers, which have the terminal spacing of more than 3 mm, in a place of near the indoor unit and outdoor unit.
- Wiring size must comply with the applicable local and national code.

### ⚠ CAUTION

- Be sure to execute the electrical work according to the Laws of each country and the Installation Instructions.
  In addition, be sure to set as exclusive line and use the rated voltage and circuit breaker.

## 6.2. Wiring method

### 6.2.1. Connection diagrams

**Standard pair**
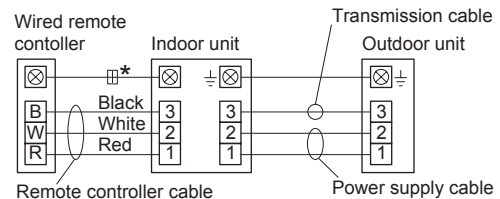


- *Ground the remote controller if it has a ground wire.

Wired remote controller is recommended using simultaneous twin or triple connection.

**Simultaneous twin**
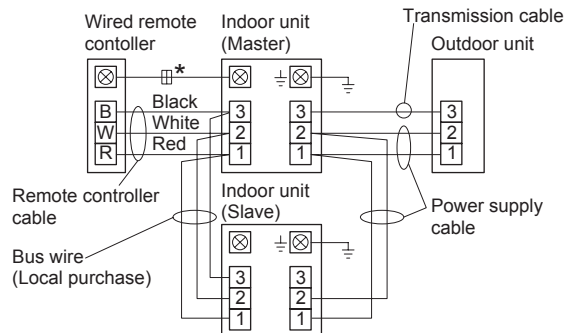


- Connect the remote controller wires to master unit.
- *Ground the remote controller if it has a ground wire.

**Simultaneous triple**
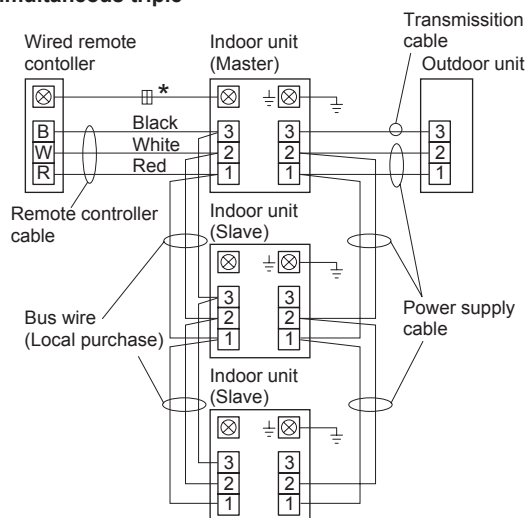


- Connect the remote controller wires to the master unit.
- *Ground the remote controller if it has a ground wire.

### 6.2.2. Connection cable preparation

Keep the earth wire longer than the other wires.
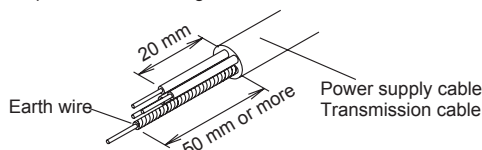


### How to connect wiring to the terminals. (For strand wiring)

(1) Use crimp-type terminals with insulating sleeves as shown in the figure below to connect to the terminal block.
(2) Securely clamp the crimp-type terminals to the wires using an appropriate tool so that the wires do not come loose.



(3) Use the specified wires, connect them securely, and fasten them so that there is no stress placed on the terminals.
(4) Use an appropriate screwdriver to tighten the terminal screws.
Do not use a screwdriver that is too small, otherwise, the screw heads may be damaged and prevent the screws from being properly tightened.
(5) Do not tighten the terminal screws too much, otherwise, the screws may break.
(6) See the table below for the terminal screw tightening torques.

#### ⚠ WARNING

- Use crimp-type terminals and tighten the terminal screws to the specified torques, otherwise, abnormal overheating may be produced and possibly cause heavy damage inside the unit.

| Tightening torque [N·m (kgf·cm)] | |
|---|---|
| M4 screw | 1.2 to 1.8 (12 to 18) |
| M5 screw | 2.0 to 3.0 (20 to 30) |



**En-10**
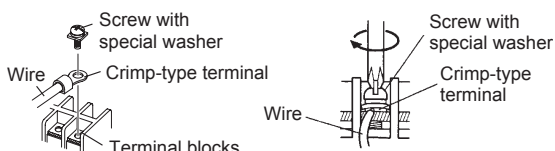
## 6.3. Connection of wiring

(1) Remove the four topping screws.
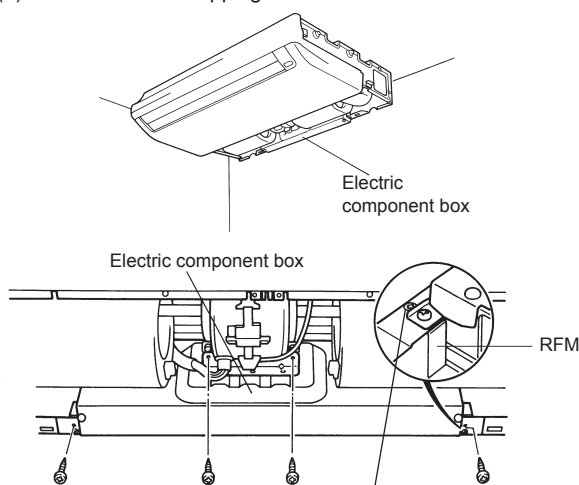


#### ⚠ CAUTION

- Do not remove the screws. If the stays are removed, the electric component box will fall.
- If you use as "Floor console", you must remove screws and RFMs (2 positions).

(2) Pull out the electric component box.
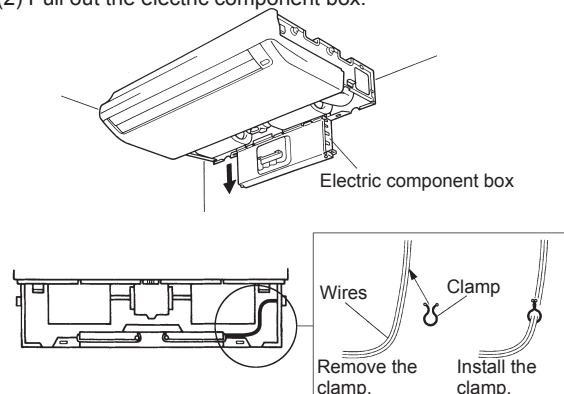


- When removing the electric component box, remove the clamp from the cables.
- After completing the work, fasten the cables as they were originally by installing the clamp.

(3) Remove the electric component box cover.
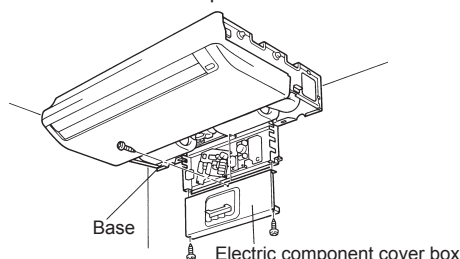


Remove the three tapping screws.

#### ⚠ CAUTION

- Be careful not to pinch the lead wires between the electric component box and base.

(4) After wiring is complete, secure the remote controller cable, connection cable with the binder.



Binder (accessory)
※Remove excess after installing

Wired remote controller cable (option)

Transmission cable
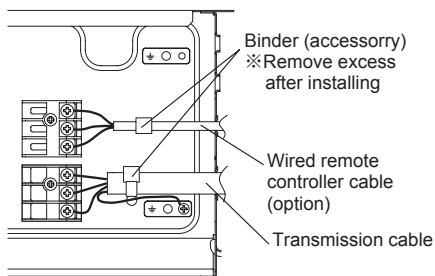
(5) Install the electrical component box in the original position after securing the cover.
(6) Install the connection cable with the supplied wire clamper.



Wire clamper (accessory)
※Remove excess after installing

Transmission cable
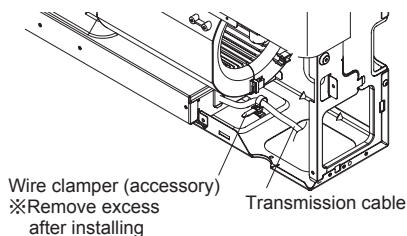
### ⚠CAUTION

• Do not bundle the remote controller cable, or wire the remote controller cable in parallel, with the indoor unit connection wire (to the outdoor unit) and the power supply cable. It may cause erroneous operation.

### 6.4. Floor console/Under ceiling select switch

(1) This unit was set for use as a ceiling type at the factory.
(2) When using the unit as a floor type, perform the following settings in FUNCTION SETTING. (Refer to **9. FUNCTION SETTING**.)
 Setting the Cooler Room Temperature Correction
 → Setting Value "01"
 Setting the Heater Room Temperature Correction
 → Setting Value "01"

## 7. MOUNT THE COVER PLATE AND THE INTAKE GRILLE

### 1. Mount the cover plate (right)

(1) Cut a pipe exit hole in the right plate. This is only when the pipe exits from the right side. (This operation is not required when the protrusion is on the top or rear.)
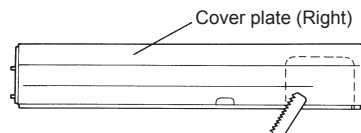


Cover plate (Right)

(2) Join the cover plates (right) and mount with the screw (ø4 × 10).
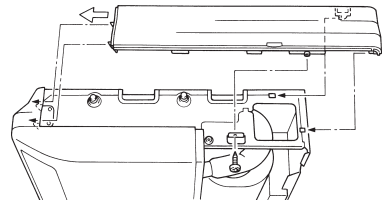


### 2. Mount the cover plate (left)

Join the cover plates (left) and mount with the screw (M4 × 10).



Cover plate (Left)
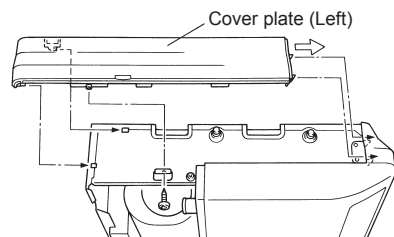
### 3. Mount the intake grille

(1) Cut the right side of the intake grille. This is only when the pipe exits from the right side.
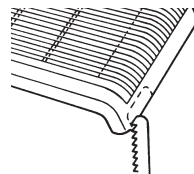


(2) Insert the hinges on the bottom of the intake grille into the holes in the base assembly. Then mount the arms to the three areas on the top of the intake grille.
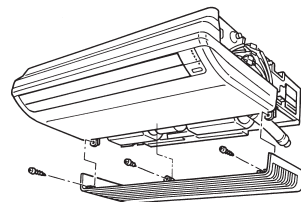
# 8. REMOTE CONTROLLER SETTING

Refer to the installation manual enclosed with the remote control unit when the wired remote control unit (option) is used.

## 8.1. Load batteries (R03/LR03 × 2)

(1) Press and slide the battery compartment lid on the reverse side to open it. Slide in the direction of the arrow while pressing the ▽ mark.
(2) Insert batteries.
   Be sure to align the battery polarities ($\oplus$ $\ominus$) correctly.
(3) Close the battery compartment lid.
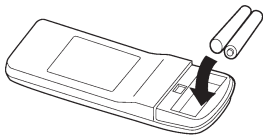


### ⚠CAUTION

• Take care to prevent infants from accidentally swallowing batteries.

• When not using the Remote Control Unit for an extended period, remove the batteries to avoid possible leakage and damage to the unit.

• If leaking battery fluid comes in contact with your skin, eyes, or mouth, immediately wash with copious amounts of water, and consult your physician.

• Dead batteries should be removed immediately and disposed of properly, either in a battery collection receptacle or to the appropriate authority.

• Do not attempt to recharge dry batteries.

**NOTE**:
• Never mix new and used batteries, or batteries of different types.
• Batteries should last about one year under normal use. If the Remote Control Unit's operating range becomes appreciably reduced, replace the batteries and press the RESET button with the tip of a ballpoint pen or other small object.

## 8.2. Installing the remote control unit holder

### ⚠CAUTION

• Check that the indoor unit correctly receives the signal from the remote control unit, then install the remote control unit holder.

• Select the remote control unit holder selection site by paying careful attention to the following: Avoid places in direct sunlight. Select a place that will not be affected by the heat from a stove, etc.

• Install the remote control unit with a distance of 7 m between the remote control unit and the photocell as the criteria. However, when installing the remote control unit, check that it operates positively.
• Install the remote control unit holder to a wall, pillar, etc., with the tapping screw.

(1) Mount the holder.



Screws
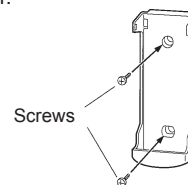
(2) Set the remote control unit.

Insert

Press in
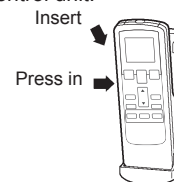


(3) To remove the remote control unit (when use at hand).
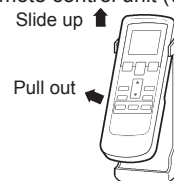
Slide up ⬆

Pull out

# 9. FUNCTION SETTING

- This procedure changes to the function settings used to control the indoor unit according to the installation conditions. Incorrect settings can cause the indoor unit malfunction.
- After the power is turned on, perform the "FUNCTION SETTING" according to the installation conditions using the remote controller.
- The settings may be selected between the following two: Function Number or Setting Value.
- Settings will not be changed if invalid numbers or setting values are selected.
- Refer to the installation manual enclosed with the remote control unit when the wired remote control unit (option ) is used.

## 9.1. Operation method

- While pressing the FAN button and SET TEMP. (▲) simultaneously, press the RESET button to enter the function setting mode.

### STEP 1
### Selecting the Remote Control Unit Signal Code
Use the following steps to select the signal code of the remote control unit.
(Note that the air conditioner cannot receive a signal code if the air conditioner has not been set for the signal code.)
The signal codes that are set through this process are applicable only to the signals in the FUNCTION SETTING. For details on how to set the signal codes through the normal process, refer to SELECTING THE REMOTE CONTROL UNIT SIGNAL CODE.

(1) Press the SET TEMP. (▲) (▼) button to change the signal code between $A → b → c → d$.
    Match the code on the display to the air conditioner signal code. (initially set to $A$) (If the signal code does not need to be selected, press the MODE button and proceed to STEP 2.)
(2) Press the TIMER MODE button and check that the indoor unit can receive signals at the displayed signal code.
(3) Press the MODE button to accept the signal code, and proceed to STEP 2.
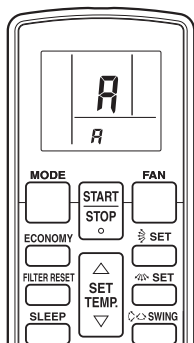


The air conditioner signal code is factory-set to A .
Contact your retailer to change the signal code.

---

The remote control unit resets to signal code A when the batteries in the remote control unit are replaced. If you use a signal code other than signal code A, reset the signal code after replacing the batteries.
If you do not know the air conditioner signal code setting, try each of the signal codes ($A → b → c → d$) until you find the code which operates the air conditioner.

### STEP 2
### Selecting the Function Number and Setting Value
(1) Press the SET TEMP. (▲) (▼) buttons to select the function number. (Press the MODE button to switch between the left and right digits.)
(2) Press the FAN button to proceed to setting the value. (Press the FAN button again to return to the function number selection.)
(3) Press the SET TEMP. (▲) (▼) buttons to select the setting value. (Press the MODE button to switch between the left and right digits.)
(4) Press the TIMER MODE button, and START/STOP button, in the order listed to confirm the settings.
(5) Press the RESET button to cancel the function setting mode.
(6) After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.
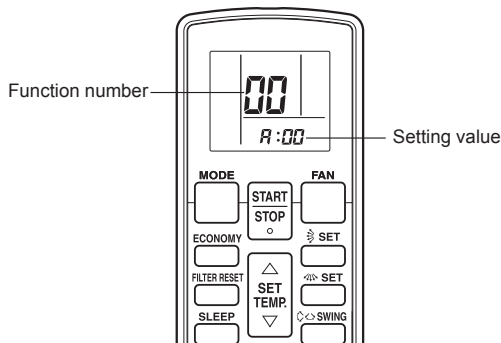
## 9.2. Function setting

### Setting the Ceiling Height
- Select the setting values in the table below according to the height of the ceiling. (The setting value is factory-set to "00".)

| Setting Description [m] | Function Number | Setting Value |
|---|---|---|
| Standard | 20 | 00 |
| High ceiling | | 01 |

When using floor console installation, don't need to change the setting value.

## Setting the Filter Sign

- The indoor unit has a sign to inform the user that it is time to clean the filter.
- Select the time setting for the filter sign display interval in the table below according to the amount of dust or debris in the room. (The setting value is factory-set to "00".)
- If you do not wish the filter sign to be displayed, select the setting value for "No indication".

| Setting Description [hours] | Function Number | Setting Value |
|---|---|---|
| Standard (400) | 11 | 00 |
| Long interval (1,000) | | 01 |
| Short interval (200) | | 02 |
| No indication | | 03 |

## Setting the Cooler Room Temperature Correction

- Depending on the installed environment, the room temperature sensor may require a correction. The settings may be selected as shown in the table below. (The setting value is factory-set to "00".)

| Setting Description | Function Number | Setting Value |
|---|---|---|
| Standard | 30 | 00 |
| Lower control | | 01 |

When using floor console installation, change the setting value to "01".

## Setting the Heater Room Temperature Correction

- Depending on the installed environment, the room temperature sensor may require a correction. The settings may be changed as shown in the table below. (The setting value is factory-set to "00".)

| Setting Description | Function Number | Setting Value |
|---|---|---|
| Standard | 31 | 00 |
| Lower control | | 01 |
| Slightly warmer control | | 02 |
| Warmer control | | 03 |

When using floor console installation, change the setting value to "01".

## Setting Other Functions

- The following settings are also possible, depending on the operating conditions. (The setting value is factory-set to "00".)

**Auto Restart**

| Setting Description | Function Number | Setting Value |
|---|---|---|
| Yes | 40 | 00 |
| No | | 01 |

**Indoor Room Temperature Sensor Switching Function (Wired remote controller only)**

| Setting Description | Function Number | Setting Value |
|---|---|---|
| No | 42 | 00 |
| Yes | | 01 |

- If setting value is "00", room temperature is controlled by the indoor unit temperature sensor.
- If setting value is "01", room temperature is controlled by either indoor unit temperature sensor or remote control unit sensor.

## Setting Record

- Record any changes to the settings in the following table.

| Setting | Setting Value |
|---|---|
| Ceiling height | |
| Filter sign | |
| Cooler room temperature correction | |
| Heater room temperature correction | |
| Auto restart | |
| Indoor room temperature sensor switching function | |

After completing the FUNCTION SETTING, be sure to turn off the power and turn it on again.

## 9.3. Selecting the remote control unit signal code

When two or more air conditioners are installed in a room and the remote control unit is operating an air conditioner other than the one you wish to set, change the signal code of the remote control unit to operate only the air conditioner you wish to set (four selections possible).
When two or more air conditioners are installed in a room, please contact your retailer to set the individual air conditioner signal codes.
• Confirm the setting of the remote control unit signal code and the printed circuit board setting.
  If these are not confirmed, the remote control unit cannot be used to operate for the air conditioner.

### Selecting the Remote Control Unit Signal Code
Use the following steps to select the signal code of the remote control unit.
(Note that the air conditioner cannot receive a signal code if the air conditioner has not been set for the signal code.)
(1) Press the START/STOP button until only the clock is displayed on the remote control unit display.
(2) Press the MODE button for at least five seconds to display the current signal code (initially set to $A$).
(3) Press the SET TEMP. (▲) (▼) button to change the signal code between $A→b→c→d$.
  Match the code on the display to the air conditioner signal code.
(4) Press the MODE button again to return to the clock display. The signal code will be changed.
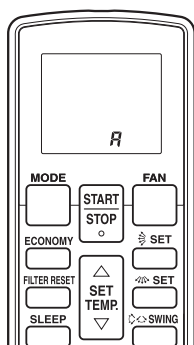


If no buttons are pressed within 30 seconds after the signal code is displayed, the system returns to the original clock display. In this case, start again from step 1.

The air conditioner signal code is set to A prior to shipment. Contact your retailer to change the signal code.

The remote control unit resets to signal code A when the batteries in the remote control unit are replaced. If you use a signal code other than signal code A, reset the signal code after replacing the batteries.
If you do not know the air conditioner signal code setting, try each of the signal codes ($A→b→c→d$) until you find the code which operates the air conditioner.

### Indoor unit setting

| Jumper wire | | Remote control unit signal code |
|---|---|---|
| JM1 | JM2 | |
| Connect | Connect | A (Primary setting) |
| Disconnect | Connect | b |
| Connect | Disconnect | c |
| Disconnect | Disconnect | d |



Indoor unit
Printed circuit board
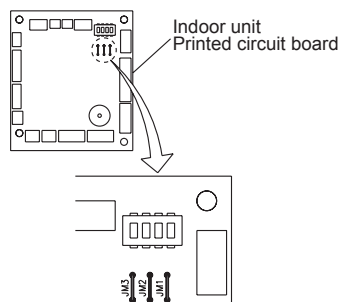
## 9.4. Special installation methods

This possible only on the wired remote control. (Option)

> ⚠ **CAUTION**
>
> • When setting DIP switches, do not touch any other parts on the circuit board directly with your bare hands.
>
> • Be sure to turn off the main power.

### 9.4.1. Simultaneous multi-system operation

• By combining with an outdoor unit, 2 units for twin and 3 units for triple indoor units, can be switched ON/OFF simultanneously.
• When different indoor unit models are connected some functions may no longer be available.

(1) Wiring method
• Refer to 6.ELECTRICAL WIRING for wiring procedure and wiring method.
• The indoor unit is connected the outdoor unit using a transmission cable is "master".
• Connect the remote controller wire to the master unit.

**Twin type**



**Triple type**
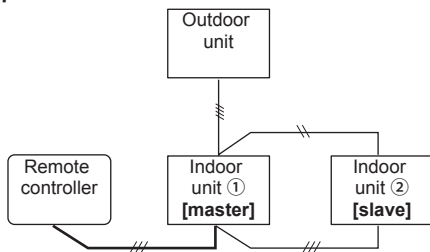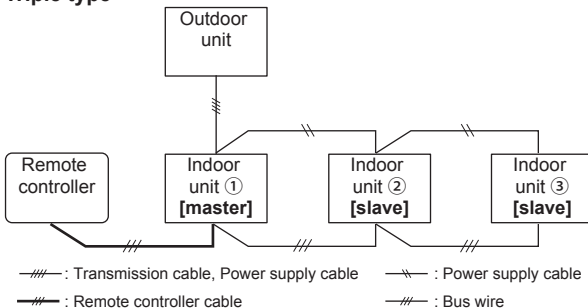


‑‑‑ : Transmission cable, Power supply cable   ——✕—— : Power supply cable
‑‑‑ : Remote controller cable   ——✕—— : Bus wire

(2) DIP switch setting (Indoor unit)
   Set the unit number of each indoor unit using the DIP switches on the indoor unit circuit board. (See the following table and figure.)
   The DIP switches are normally set to make the unit number 00.

| Indoor unit | Unit number | DIP SWITCH No. | | | |
| --- | --- | --- | --- | --- | --- |
| | | 1 | 2 | 3 | 4 |
| ① | 00 | OFF | OFF | OFF | OFF |
| ② | 01 | ON | OFF | OFF | OFF |
| ③ | 02 | OFF | ON | OFF | OFF |
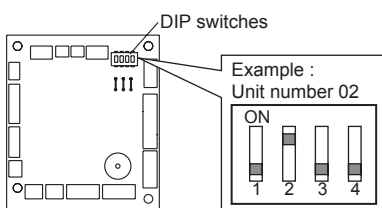


Circuit board in the control box of indoor unit.

**NOTE**
Be sure to set the unit numbers sequentially.

(3) Remote controller setting
   1. Turn on all of the indoor units.
      When the indoor units are turned on, error codes 01 and 31 will be displayed; however, these error codes will be deleted by setting the remote controller. Therefore, continue with the setting procedure.
   2. Set the master and slave settings.
      Set the indoor unit that is not connected to the outdoor unit using a transmission cable as the "01".
      (The setting value is factory-set to "00".)

| Indoor unit | Unit number | Function Number | Setting Value |
| --- | --- | --- | --- |
| ① | 00 | | 00(Master) |
| ② | 01 | 51 | 01(Slave) |
| ③ | 02 (Only triple type) | | 01(Slave) |

   3. After completing the function settings, turn off all of the indoor units, and then turn them back on.
      * If error code 01, 1F, 30, 31, or 32 is displayed, there may be an incorrect setting. Perform the remote controller setting again.

**Twin type**



| DIP switch setting (Indoor unit) ・ Unit number | 00 | 01 |
| --- | --- | --- |
| Remote controller setting ・ Unit number | 00 | 01 |
| ・ Setting value (Master/Slave) | 00 | 01 |

**Triple type**



| DIP switch setting (Indoor unit) ・ Unit number | 00 | 01 | 02 |
| --- | --- | --- | --- |
| Remote controller setting ・ Unit number | 00 | 01 | 02 |
| ・ Setting value (Master/Slave) | 00 | 01 | 01 |

‑‑‑ : Transmission cable, Power supply cable   ——✕—— : Power supply cable
‑‑‑ : Remote controller cable   ——✕—— : Bus wire

## 9.4.2. Group control system

A number of indoor units can be operated at the same time using a single remote controller.
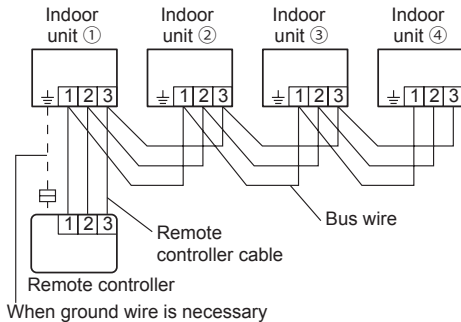
(1) Wiring method (indoor unit to remote controller)



Indoor unit ①    Indoor unit ②    Indoor unit ③    Indoor unit ④

Bus wire

Remote controller cable

Remote controller

When ground wire is necessary

(2) DIP switch setting (Indoor unit)

Set the unit number of each indoor unit using the DIP switches on the indoor unit circuit board. (See the following table.)

The DIP switches are normally set to make the unit number 00.

| Indoor unit | Unit number | DIP SWITCH No. | | | |
|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 |
| ① | 00 | OFF | OFF | OFF | OFF |
| ② | 01 | ON | OFF | OFF | OFF |
| ③ | 02 | OFF | ON | OFF | OFF |
| ④ | 03 | ON | ON | OFF | OFF |
| ⑤ | 04 | OFF | OFF | ON | OFF |
| ⑥ | 05 | ON | OFF | ON | OFF |
| ⑦ | 06 | OFF | ON | ON | OFF |
| ⑧ | 07 | ON | ON | ON | OFF |
| ⑨ | 08 | OFF | OFF | OFF | ON |
| ⑩ | 09 | ON | OFF | OFF | ON |
| ⑪ | 10 | OFF | ON | OFF | ON |
| ⑫ | 11 | ON | ON | OFF | ON |
| ⑬ | 12 | OFF | OFF | ON | ON |
| ⑭ | 13 | ON | OFF | ON | ON |
| ⑮ | 14 | OFF | ON | ON | ON |
| ⑯ | 15 | ON | ON | ON | ON |

**NOTE**
Be sure to set the unit numbers sequentially.

(3) Remote controller setting
1. Turn on all of the indoor units.
   *1 Turn on the indoor unit with the unit number 00 last. (Within 1 minute)
   *2 When the indoor units are turned on, error codes 01 and 31 will be displayed; however, these error codes will be deleted by setting the remote controller. Therefore, continue with the setting procedure.
2. Set the refrigerant circuit address.
   Assign the same number to all of the indoor units connected to an outdoor unit.
   (The unit is factory-set to "00")

| Indoor unit | Unit number | Function Number | Setting Value |
|---|---|---|---|
| ① | 00 | | |
| ② | 01 | | |
| ∫ | ∫ | 02 | 00～15 |
| ⑮ | 14 | | |
| ⑯ | 15 | | |

3. After completing the function settings, turn off all of the indoor units, and then turn them back on.
   * If error code 01, 1F, 30, 31, or 32 is displayed, there may be an incorrect setting. Perform the remote controller setting again.



| | Outdoor unit ① | Outdoor unit ② | Outdoor unit ③ | Outdoor unit ④ |
|---|---|---|---|---|
| Remote controller / Indoor unit | Indoor unit ① | Indoor unit ② | Indoor unit ③ | Indoor unit ④ |
| **DIP switch setting (Indoor unit)** · Unit number | 00 | 01 | 02 | 03 |
| **Remote controller setting** · Unit number | 00 | 01 | 02 | 03 |
| · Setting value (Refrigerant circuit address) | 00 | 01 | 02 | 03 |

──╫── : Transmission cable, Power supply cable    ──╳── : Power supply cable
──╫── : Remote controller cable    ──╫── : Bus wire

**NOTE**
When different indoor unit models are connected using the group control system, some functions may no longer be available.
If the group control system contains multiple units that are operated simultaneously, connect and set the units as shown below.



| | Standard pair | Simultaneous twin | | Simultaneous triple | | |
|---|---|---|---|---|---|---|
| | Outdoor unit ① | Outdoor unit ② | | Outdoor unit ③ | | |
| Remote controller | Indoor unit ① | Indoor unit ② | Indoor unit ③ | Indoor unit ④ | Indoor unit ⑤ | Indoor unit ⑥ |
| **DIP switch setting (Indoor unit)** · Unit number | 00 | 01 | 02 | 03 | 04 | 05 |
| **Remote controller setting** Refrigerant circuit address setting (Function number 02) · Unit number | 00 | 01 | 02 | 03 | 04 | 05 |
| · Setting value | 00 | 01 | 01 | 02 | 02 | 02 |
| Master/Slave setting (Function number 51) · Unit number | 00 | 01 | 02 | 03 | 04 | 05 |
| · Setting value | 00 | 00 | 01 | 00 | 01 | 01 |

──╫── : Transmission cable, Power supply cable    ──╳── : Power supply cable
──╫── : Remote controller cable    ──╫── : Bus wire

*Make sure that the indoor unit with the unit number 00 is connected to the outdoor unit using a transmission cable.

### 9.4.3. Dual remote controllers

- Two separate remote controllers can be used to operate the indoor units.
- The timer and self-diagnosis functions cannot be used on the slave unit of remote controller.

(1) Wiring method (indoor unit to remote controller)
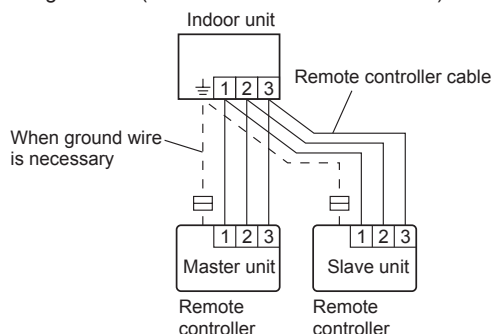


(2) Remote controller DIP switch 1 setting
Set the remote controller DIP switch 1-No. 2 according to the following table.

|  | **DIP SW 1-No. 2** |
|---|---|
| **Master unit** | OFF |
| **Slave unit** | ON |

# 10. TEST RUN

**CHECK ITEMS**
(1) Is operation of each button on the remote control unit normal?
(2) Does each lamp light normally?
(3) Do not air flow direction louvers operate normally?
(4) Is the drain normal?
(5) Is there any abnormal noise and vibration during operation?
- Do not operate the air conditioner in the running state for a long time.
- Test running

> When the air conditioner is run by pressing the remote control unit test run button, the OPERATION and TIMER Lamps flash slowly at the same time.

### [Operation method]

- For the operation method, refer to the operating manual.
- The outdoor unit may not operate depending on the room temperature.
  In this case, press the test run button on the remote control unit while the air conditioner is running. (Point the transmitter section of the remote control unit toward the air conditioner and press the test run button with the tip of a ballpoint pen, etc.)
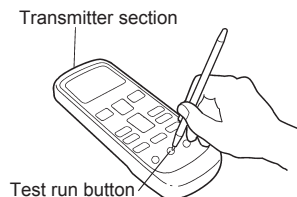


- To end test operation, press the remote control unit START/STOP button. (When the air conditioner is run by pressing the test run button, the OPERATION Lamp and TIMER Lamp will simultaneously flash slowly.)

### [Using the wired remote control] (Option)

- For the operation method, refer to the operating manual.
(1) Stop the air conditioner operation.
(2) Press the master control button and the fan control button simultaneously for 2 seconds or more to start the test run.



Test run display
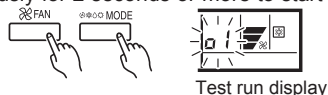
(3) Press the start/stop button to stop the test run.

## 11. CHECK LIST

Pay special attention to the check items below when installing the indoor unit(s). After installation is complete, be sure to check the following check items again.

| CHECK ITEMS | If not performed correctly | CHECK BOX |
|---|---|---|
| Has the indoor unit been installed correctly? | Vibration, noise, indoor unit may drop | |
| Has there been a check for gas leaks (refrigerant pipes)? | No cooling, No heating | |
| Has heat insulation work been completed? | Water leakage | |
| Does water drain easily from the indoor units? | Water leakage | |
| Are the wires and pipes all connected completely? | No operation, heat or burn damage | |
| Is the connection cable the specified thickness? | No operation, heat or burn damage | |
| Are the inlets and outlets free of any obstacles? | No cooling, No heating | |
| After installation is completed, has the proper operation and handling been explained to the user? | | |

## 12. ERROR CODES

If you use a wired type remote control, error codes will appear on the remote control display. If you use a wireless remote control, the lamp on the photo detector unit will output error codes by way of blinking patterns. See the lamp blinking patterns and error codes in the table below.

### Troubleshooting
**[Troubleshooting with the indoor display]**
Troubleshooting at the display is possible either on the wired or wireless remote control.

- OPERATION lamp (Green)
- TIMER lamp (Orange)
- FILTER lamp (Red)
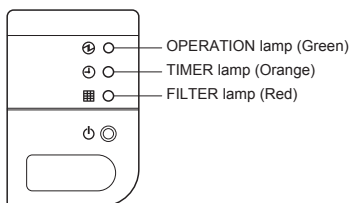
The OPERATION, TIMER and FILTER Lamp operate as follows table according to the error contents.

| OPERATION Lamp | TIMER Lamp | FILTER Lamp | Error contents |
|---|---|---|---|
| ✕ | (2 times) ○ | ✕ | Indoor signal error |
| ✕ | (3 times) ○ | ✕ | |
| ✕ | (4 times) ○ | ✕ | |
| ✕ | (5 times) ○ | ✕ | |
| ✕ | (8 times) ○ | ✕ | Wired remote controller abnormal |
| (2 times) ○ | (2 times) ○ | ✕ | Indoor room temperature sensor error |
| (2 times) ○ | (3 times) ○ | ✕ | Indoor heat exchanger temperature sensor (middle) error |
| (2 times) ○ | (4 times) ○ | ✕ | Indoor heat exchanger temperature sensor (inlet) error |
| (2 times) ○ | (6 times) ○ | ✕ | Float switch operated |
| (3 times) ○ | (2 times) ○ | ✕ | Outdoor discharge pipe temperature sensor error |
| (3 times) ○ | (3 times) ○ | ✕ | Outdoor heat exchanger temperature sensor (outlet) error |
| (3 times) ○ | (4 times) ○ | ✕ | Outdoor temperature sensor error |
| (3 times) ○ | (7 times) ○ | ✕ | Heat sink thermistor (Inverter) error |
| (3 times) ○ | (8 times) ○ | ✕ | Compressor temperature sensor error |
| (3 times) ○ | ✕ | (2 times) ○ | 2-way valve temperature sensor error |
| (3 times) ○ | ✕ | (3 times) ○ | 3-way valve temperature sensor error |
| (3 times) ○ | ✕ | (4 times) ○ | Outdoor heat exchanger temperature sensor (middle) error |
| (3 times) ○ | ✕ | (5 times) ○ | Heat sink thermistor P.F.C. error |
| (4 times) ○ | (2 times) ○ | ✕ | Indoor manual auto switch abnormal |
| (4 times) ○ | (4 times) ○ | ✕ | Power supply frequency detection error |
| (5 times) ○ | (2 times) ○ | ✕ | IPM protection |
| (5 times) ○ | (3 times) ○ | ✕ | CT error |
| (5 times) ○ | (5 times) ○ | ✕ | Compressor location error |
| (5 times) ○ | (6 times) ○ | ✕ | Outdoor fan error |
| (5 times) ○ | (7 times) ○ | ✕ | Connected indoor unit abnormal |
| (5 times) ○ | (8 times) ○ | ✕ | Outdoor unit computer communication error |
| (5 times) ○ | ✕ | (2 times) ○ | Inverter error |
| (6 times) ○ | (2 or 3 times) ○ | ✕ | Indoor fan abnormal |
| (7 times) ○ | (2 times) ○ | ✕ | Discharge temperature error |
| (7 times) ○ | (3 times) ○ | ✕ | Excessive high pressure protection on cooling |
| (7 times) ○ | (4 times) ○ | ✕ | 4-way valve abnormal |
| (7 times) ○ | (5 times) ○ | ✕ | Pressure switch abnormal, Pressure sensor abnormal |
| (7 times) ○ | (6 times) ○ | ✕ | Compressor temperature error |
| (7 times) ○ | (7 times) ○ | ✕ | Low pressure error |
| (8 times) ○ | (2 or 3 times) ○ | ✕ | Active filter abnormal |
| (8 times) ○ | (4 times) ○ | ✕ | P.F.C. circuit error |
| (8 times) ○ | (6 times) ○ | ✕ | P.F.C. printed circuit board error |
| (9 times) ○ | (2 times) ○ | ✕ | Refrigerant circuit address set-up error |
| (9 times) ○ | (3 times) ○ | ✕ | Master unit, Slave unit set-up error |
| (9 times) ○ | (4 times) ○ | ✕ | Connected the indoor number set-up error |

○:0.5s ON/0.5s OFF (Flash)  ✕:OFF
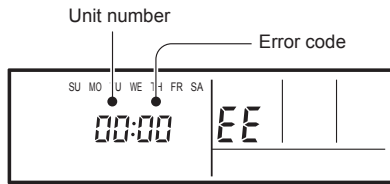
## [Troubleshooting at the remote control LCD]

This is possible only on the wired remote control. (Option)

## [Self-diagnosis]

This is possible only on the wired remote control. (Option)
If an error occurs, the following display will be shown.
("EE" will appear in the set room temperature display.)

Unit number

Error code

SU MO TU WE TH FR SA

00:00   EE

Ex. Self-diagnosis

| Error code | Error contents |
|---|---|
| 01<br>13<br>26<br>27 | Indoor signal error |
| 00 | Wired remote controller abnormal |
| 02 | Indoor room temperature sensor error |
| 04 | Indoor heat exchanger temperature sensor (middle) error |
| 28 | Indoor heat exchanger temperature sensor (inlet) error |
| 09 | Float switch operated |
| 0c | Outdoor discharge pipe temperature sensor error |
| 06 | Outdoor heat exchanger temperature sensor (outlet) error |
| 0A | Outdoor temperature sensor error |
| 0E | Heat sink thermistor (Inverter) error |
| 15 | Compressor temperature sensor error |
| 1d | 2-way valve temperature sensor error |
| 1E | 3-way valve temperature sensor error |
| 29 | Outdoor heat exchanger temperature sensor (middle) error |
| 2d | Heat sink thermistor P.F.C. error |
| 20 | Indoor manual auto switch abnormal |
| 2A | Power supply frequency detection error |
| 17 | IPM protection |
| 18 | CT error |
| 1A | Compressor location error |
| 1b | Outdoor fan error |
| 1F | Connected indoor unit abnormal |
| 1c | Outdoor unit computer communication error |
| 2E | Inverter error |
| 12 | Indoor fan abnormal |
| 0F | Discharge temperature error |
| 24 | Excessive high pressure protection on cooling |
| 2c | 4-way valve abnormal |
| 16 | Pressure switch abnormal, Pressure sensor abnormal |
| 2b | Compressor temperature error |
| 2F | Low pressure error |
| 19 | Active filter abnormal |
| 25 | P.F.C. circuit error |
| 30 | Refrigerant circuit address set-up error |
| 31 | Master unit, Slave unit set-up error |
| 32 | Connected the indoor number set-up error |
| 33 | P.F.C. printed circuit board error |

If "C0" appears in the unit number display, there is a remote controller error.

| Unit number | Error code | Content |
|---|---|---|
| C0 | 1d | Incompatible indoor unit is connected |
| C0 | 1c | Indoor unit ↔ remote controller communication error |

## 13. CUSTOMER GUIDANCE

Explain the following to the customer in accordance with the operating manual:
(1) Starting and stopping method, operation switching, temperature adjustment, timer, air flow switching, and other remote control unit operations.
(2) Air filter removal and cleaning, and how to use the air louvers.
(3) Give the operating and Installation Manuals to the customer.
(4) If the signal code is changed, explain to the customer how it changed (the system returns to signal code A when the batteries in the remote control unit are replaced).
  *(4) is applicable to using wireless remote control.